Wholesome Wave Communities Market Approach

Nikita Mehta
namehta15@gmail.com

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Wholesome Wave Communities Market Approach

Nikita Mehta
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Yale School of Public Health, Social and Behavioral Sciences
Wholesome Wave Advisor: David Juros
Advisor: Debbie Humphries, PhD, MPH
Committee Members: Kathleen O’Connor Duffany, PhD, MEd
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Abstract
In 2017, approximately 1.2 million residents, or 14.4% of the population, in New York City were identified as food insecure, which is higher than the national rate of 11.8%. Wholesome Wave is a non-profit organization based in the Northeastern region of the United States that develops programming for consumers to make healthier food choices through increases in affordable access to healthy, locally and regionally grown foods. Wholesome Wave makes fruits and vegetables affordable through their Wholesome Communities initiative which includes the SNAP Double Value Program and the FVRx. This report builds a strategic go-to-market approach by identifying key funders, partners, and populations to allow Wholesome Wave to efficiently and effectively bring Wholesome Communities to the targeted market of New York City.

The existing network of food coordination and organizations in New York City is complex, therefore it is recommended that there are a few important action points to consider when first entering this market and further expanding upon their programming.

1. The major funders identified in this report all have a focus on food insecurity and improving the health of New York City residents through the means of food coordination. They are: United Way of New York City, Helmsley Charitable Trust, New York State Health Foundation, and JPB Foundation. Prior to submitting formal applications, there should be contact made to key people within each funding source in New York City through Wholesome Wave communication methods (i.e. newsletters). The outreach should ensure that prior success in other markets is highlighted through news coverage, success stories, and case studies.

2. The food partnership landscape in New York City is diverse, and as such, there is the opportunity to expand Wholesome Wave initiatives. Through cooperation with NYC Food Policy and the Office of Food & Nutrition Services, Wholesome Wave can develop partnerships with the other initiatives they support (i.e. Green Carts and Shop Health NYC), so that populations and neighborhoods that are not reached yet can be established. Through City Harvest, Wholesome Wave can bring SNAP doubling to their utilizers, given that the population served is already struggling with food insecurity. Given that the FVRx program was successful within the New York City Health and Hospitals Corporation, Wholesome Wave can leverage this partnership to distribute coupons at the hospital-sponsored farmers’ markets.

3. Three major populations to first focus on within New York City include veterans, senior citizens, and immigrants. It is suggested that additional partnerships with organizations that support these populations in other social-determinant areas should be made. This includes the Military Family Clinic at NYU Langone, the VA NY Harbor Health System, Hope for the Warriors, HRA’s office of SNAP outreach services, Make the Road New York, and the New York Immigration Coalition.

4. Best practices for marketing strategies for New York City include social media campaigns that introduce education related to Wholesome Waves benefits. Strategies can include testimonials, comparison of food prices with and without SNAP doubling, and suggestions of recipes and storage for fresh produce.
Introduction
In the United States, there has been an increase in chronic conditions and diseases, including diabetes and obesity. Fortunately, there is overwhelming research supporting that these chronic diseases can be prevented and managed through access to food and exercise at an individual level. However, from 2004-2010, over 75% of those studied consumed less than the recommended servings of fruits, whole grains, and vegetables, whereas 86% of those studied consumed more than the USDA’s recommended serving of fat in America. Increasing fruit and vegetable consumption to 600 grams per day would decrease the burden of heart disease by 31%, stomach cancer by 19%, and lung cancer by 12%, and would reduce the number of deaths per year by over 2.6 million. These chronic related illnesses contribute to a financial strain on not only on the individuals affected, but the health care system in general. Many individuals do not consume healthy foods due to their environment (e.g., lack of affordable and accessible grocery stores or markets), lack of knowledge of what is considered “healthy”, lack of support from their health providers or social network, or other larger structural issues such as intergenerational poverty or pay inequity. Lower-income households’ consumption of a poor diet can mostly be explained by access and cost. Approximately 30 million people live in low-income communities without access to a full-service supermarket, and those available in those areas are often costlier than counterparts in higher income areas. There has been government programming and policy addressing access and cost in the forms of federal food and nutrition assistance programs, including the Special Supplemental Nutrition Program for Woman, Infants, and Children (WIC), the Supplemental Nutrition Assistance Program (SNAP), and the Senior Farmers Market Nutrition Program (SFMNP). On the state and city level, the development of affordable grocery stores and farmers’ market are part of the solution to increase food access in low-income areas. However, there are limitations to the availability of farmers’ markets. Consumers have noted their lack of convenience to be a barrier, considering their limited hours and seasonal dependence. Additionally, among food stamp customers, perceptions of farmers’ markets include complex shopping experiences, the lack of discounts, and the higher prices. Additionally, only approximately 25% of farmers’ markets across the country accept SNAP. SNAP programming still has existing challenges and barriers to offering healthy foods. It is recognized that nutrient-dense foods are still expensive and SNAP benefits are inadequate to cover the costs of these items. There are geographic factors associated as well, including a reported inadequate number of supermarkets in low-income neighborhoods and a limited number of high-nutrition foods in convenience stores. SNAP benefits cannot be used on prepared hot foods in grocery stores or any prepared food (hot or cold) sold and meant to be eaten in the store, and thus beneficiaries who may not have the means to prepare food can be at a disadvantage. Additionally, neighborhood violence, time constraints, and lack of transportation are noted as challenges for those participating in SNAP programming. Motivated by the Food Insecurity Nutrition Incentive (FINI) Grant Program, some organizations have been developed to incentivize the buying of fresh produce to address some of the financial constraints. This could
ultimately restrict the purchase of nutrient-poor foods and beverages. For example, the Massachusetts’ Health Incentives Pilot Program (HIP), incentivized SNAP participants with 30 cents for every SNAP dollar spent on fruits and vegetables. This included fresh, canned, frozen, or dried. Those who participated in the programming spent more SNAP benefits on fruits and vegetables and reported consuming approximately 26% more fruits and vegetables per day than non-participants.9

Wholesome Wave is a non-profit organization based in the Northeastern region of the United States that develops programming for consumers to make healthier food choices through increases in affordable access to healthy, locally and regionally grown foods. Wholesome Wave makes fruits and vegetables affordable through their Wholesome Communities initiative which includes: Doubling the value of SNAP when spent on fruits and vegetables and the FVRx program which is working with healthcare clinics to “prescribe” produce. Wholesome Wave also is creating direct to consumer programs using their Wholesome Wave Rewards Card – a reloadable debit card to amass, store and redeem produce incentives. Through the Wholesome Communities initiative, Wholesome Wave has stated a goal to bring $180M of produce incentives to 2M people by 2022.

**Purpose**

The purpose of this project is to build a strategic go-to-market approach to allow Wholesome Wave to efficiently and effectively bring Wholesome Communities to the targeted market of New York City. This guide, informed by prior research on this market, is designed to help identify marketing, recruiting, and evaluation strategies for this effort.

**Methods**

To identify programmatic values and the market overview, literature and general research were utilized and 3 constituent interviews were conducted with non-profit and community organization employees to draw conclusions. These were informational interviews that summarized funder and organizational mission and values. These were conducted with the following: United Way of New York City, City Harvest, and NYC Food Policy. Potential funders were found through GuideStar with key words food insecurity, food, nutrition, and health. Public financial statements of all potential funders were analyzed, including Form 990s and audited financial statements to determine past funding recipients. Leaders at funder organizations were contacted for interviews regarding how to best approach the New York City market. Partnerships and participant landscape analysis was performed through systematic literature reviews (i.e. PubMed) of current food insecurity interventions in New York City, news articles found through Google, and general internet searches on Google..
Findings
New York City Landscape
In 2017, approximately 1.2 million residents, or 14.4% of the population, in New York City were identified as food insecure, which is higher than the national rate of 11.8%. Nearly 22.3% of children in New York City experience food insecurity. According to the most recent data available, New York City has a Meal Gap (missing meals that result from insufficient household resources to purchase food) of 242 million meals in 2014. By borough, Brooklyn has the highest Meal Gap (more than 5.8 million meals), followed by parts of Queens and the Bronx (Figure 1).

In New York City, one of the major issues that residents have had to face is the disproportionate rise in cost of living to income. Income is the one of the most important determinants of food insecurity and hunger. Research has shown that households with incomes near or below the Federal Poverty Line were more likely to suffer from food insecurity. Other determinants of food insufficiency include household-stressors, such as job loss, gaining a member of the household, or losing SNAP benefits. Additionally, food costs in New York City, which have been rising (more than 16% over the past 6 years), are significantly higher than other cities in the United States and are variable across the boroughs. For example, total costs for purchasing groceries in Manhattan will be on average 66% higher than purchasing the same food in the Bronx. SNAP is one of the main resources for residents in New York City to receive access to affordable food, with over 1.6 million recipients. As of 2017, 15% of New York City residents were participating in SNAP, with most participants located in the Bronx and Brooklyn.

However, on average an individual in a family of four on SNAP benefits receives approximately $1.90 for each meal, whereas the average meal cost in New York City is $5.06. Discrepancies in benefits and actual cost of food can lead people to purchase unhealthier meals and can further food insecurity. Operationally, there has been some challenges as well. In early 2018, there was discussion that Novo Dia Group, the provider that facilitated the cash-free transactions at farmers’ markets, would end their service due to “profit loss” and competing contracting. Given the significant amount of SNAP recipients who shop at the markets and transactions using SNAP benefits, this interruption would have prevented transactions. Fortunately, New York state negotiated agreements to keep the services running and other companies invested in its operations. However, the dependence on external players on these transactions is risky as farmers’ markets may not be able to process SNAP benefits, and other supplemental nutrition tokens and coupons.

Numerous studies have also shown associations between food insecurity and adverse health outcomes, including cardiovascular diseases, obesity, hypertension, and mental health and developmental problems. As of 2017, 25.7% of adults were classified as obese, 10.5% of adults had diabetes, and 29.4% of adults had hypertension in New York City (Figure 2). Wholesome Wave has the opportunity to build programming within the city to combat these chronic conditions and food insecurity.
New York City is unique given the diverse market of residents, communities, and businesses. While there may be many resources available to address food insecurity of New York City, it is still a very complex network that needs more coordination between suppliers. There is existing programming available to address food insecurity including the Farmer’s Market Nutrition Program (FMNP). Originally established in 1992, the FMNP, aims to improve the health of nutritionally at-risk women, infants and children through access to fresh produce and nutrition education and to support small farmers and the economic vitality of communities by expanding the awareness and use of farmers' markets. Currently, there are two programs that concentrate on women and children and on seniors. The New York City health market is dominated by organizations like the New York City Department of Health and Mental Hygiene and the Health and Hospital Corporation, and is influenced by policies of New York City’s Mayor’s office. It is important for Wholesome Wave to partner with organizations that focus on increasing food access for low-income New York City residents and understand the food insecurity status before further building out strategic initiatives.

**Programmatic Values and Market Approach for Wholesome Wave**

**Funder Landscape in NYC**

It is important to seek support from New York City funders who focus on food security and improving the health of New York City residents through the means of food coordination. Below is a list of potential funders with programmatic values that align with the mission of Wholesome Wave.

Across many of the potential funders, there are clear standards or requirements that would be expected of grantees. These include an overarching mission that aligns with the mission statement of the foundation, existing evaluation procedures and timelines to measure outcomes, success in other markets, and financial stability. Particularly in New York City, as there are many existing non-profits in the area and initiatives that focus on increasing affordable access to healthy produce and food in general, a key strategy is to formulate partnerships with the identified funders by relaying Wholesome Wave’s values and success in other markets. An example of this is having key points of contact receiving newsletter updates from Wholesome Wave prior to formal application for grants. Presenting data from Wholesome Wave’s existing programming is essential to present to funders. Written testimonials provide qualitative data support, whereas infographics displaying health changes would provide quantitative support. Additionally, any previous news coverage can be utilized to display impact upon other markets. In New York City, it is suggested that funding should first be sought out from federal grants, such as the Food Insecurity Nutrition Incentive Grant Program, which specifically was formed to support SNAP incentive programs.
The mission of United Way of New York City (UWNYC) is to help mobilize their communities to break down barriers and build opportunities that improve the lives of low-income New Yorkers. Of their five key issues, Wholesome Wave is well aligned with their FeedNYC initiative. Their strategy is to strengthen the capacity of emergency food providers to distribute healthy food to underserved neighborhoods in New York City. They work as an administrator of the New York State Department of Health’s Hunger Prevention and Nutrition Assistance Program (HPNAP) and the Emergency Food and Shelter Program (EFSP). With HPNAP, UWNYC provides food and operations support funding, training, and assistance to food pantries and soup kitchens. They also work to improve the nutritional value of food for New Yorkers by providing nutrition education to emergency food operators.

There is also the opportunity to work with the United Way’s network of Community-Based Organizations (CBOs). UWNYC provides Seed Grants to CBOs based in New York that aim to provide emergency food, healthy food access, and nutrition education needs of low-income people. Wholesome Wave can aim to bring resource enhancement and community partnerships with farmer’s markets. UWNYC has worked with over 700 nonprofits throughout the five boroughs each year. The organization awarded $34.4 million in grants in 2017, exemplifying how it has the capacity to fund larger projects. Wholesome Wave can extend its mission through the FeedNYC initiative as well as gain support from its educational components.

The mission of the Helmsley Charitable Trust is to improve lives in the United States and globally by supporting health and place-based initiatives. They have procured $1.6 billion in grants since their inception and their 2016 asset value is $5.26 billion, exemplifying how they have the capacity to fund larger projects. Wholesome Wave aligns with two of their missions: Building Health Stability and Care Coordination. The New York City Food Assistance Collaborative supported by the Helmsley Charitable Trust works with organizations that are familiar to Wholesome Wave including City Harvest and others such as United Way of New York and the New York State Department of Health Hunger Prevention and Nutrition Assistance Program. The Collaborative also partners with the Mayor’s Office for Food Policy. All their current grants are made to organizations identified by Helmsley, with the exception of a limited number of Requests for Proposals (RFPs), therefore they do not accept unsolicited grant requests. With further partnerships with grantees such as City Harvest, there is potential for this funder to award future grants to Wholesome Wave.
New York State Health Foundation  
https://nyshealthfoundation.org

The New York State Health Foundation (NYSHealth) seeks to improve the health of all New Yorkers by making grants, improving health care policy and practice, and supporting other health-forward initiatives. Two missions that aligns with Wholesome Wave’s practice include Building Healthy Communities and Empowering Health Care Consumers. To apply for funding, the avenue would be through the 2019 Special Projects Fund, however the grant process is competitive. Historically, resources have been allocated to only 5% of the proposals.

JPB Foundation  
https://www.jpbfoundation.org/

The JPB Foundation directs funding to three program areas, one of which focuses on enabling a healthy environment. They primarily focus on low-income communities and underserved communities of color by working with nonprofits and other funders to leverage resources. They work to scale “high quality, promising and proven services”, meaning that evidence-based programming is an important programmatic value to the Foundation. Additionally, they focus on organizations that address “root causes”. The demographic of Wholesome Wave aligns with the mission of JPB Foundation, as its programming is highly evidence-supported and success has been measured with data and increasing food accessibility is a root factor for disease prevention and household security. However, the foundation only gives grants to organizations that they specifically solicit grant applications. They do not accept “unsolicited proposals”.

Partnerships Landscape in NYC

Strategic operational partners in New York City include hospitals, federally qualified health centers, insurers, primary schools, colleges and universities, religious organizations, military organizations, aging or community centers, and food banks. Farmers’ markets are also integral partners to the initiatives to Wholesome Wave. Partnerships with local health departments and community-based organizations can help recognize farmers’ markets that are available and accessible for residents of low-income neighborhoods. As the initiatives for Wholesome Wave will have many points of dissemination, partnerships with local CBOs can distribute coupons, promote use, and identify key populations that Wholesome Wave can reach.

Hospitals are a key partner, as Wholesome Wave can implement their FVRx programming with partnered providers and provider groups. With the passing of the Affordable Care Act (ACA 2010), there has been a push towards preventative care and investment in community health benefits across the United States. Sections 4001 and 4002 of the Affordable Care Act has promoted population health spending which has given a policy basis for community health initiatives. The main strategic hospital partners include the Mt. Sinai Healthcare System, NYU
Langone Health, the Weill Cornell Health System, Columbia University Irving Medical Center, New York Presbyterian, and the NYC Health and Hospitals. As NYC Health and Hospitals is the largest public health system in the country, it is recommended that new initiatives be piloted through them. They have over 70 patient care locations in New York City and have experience piloting new Public Health Initiatives, such as the Health Steps program. Additionally, Wholesome Wave has existing success with piloting the FVRx Program within their network of hospitals. The potential list of partners is detailed below with additional contact information listed in Table 1.

NYC Food Policy
The NYC Office of the Director of Food Policy aims to address public health issues such as food insecurity and environmental sustainability in the food system. It coordinates with differing city agencies that work with food programs and policies. They have four programmatic values including:

- Improve the nutrition and quality of food served by City agencies and contractors
- Address food insecurity and provide emergency food assistance
- Improve healthy food access and awareness
- Ensure the environmental sustainability of our food system

Wholesome Wave’s goals align with improving healthy food access and awareness. NYC Food Policy supports a few initiatives such as Green Carts, Shop Healthy NYC, Health Bucks, and Food Retail Expansion to Support Health (FRESH). Shop Healthy NYC currently works with three neighborhoods (the Bronx, Brooklyn, and Manhattan) to partner with food retailers, food suppliers, and distributors to improve access to foods. They primarily focus on neighborhoods with high obesity rates by promoting to “Adopt-a-Shop” to neighborhood residents so that they can be empowered to improve availability of healthier foods and beverages in neighborhood food retailers. Additionally, Health Bucks, a similar program in NYC is a practice-tested intervention developed by the New York City Department of Health and Mental Hygiene. It distributes $2 coupons that can be redeemed for fresh fruits and vegetables at participating farmers’ markets, thus increasing the purchasing power of their benefits by 40%. The participants already receive federal benefits, thus farmers’ markets that accept SNAP through Electronic Benefits Transfer (EBT) give one coupon to a customer for every $5 spent using SNAP. These types of programming exhibit that NYC government initiatives supports the values of Wholesome Wave and would serve as a valuable partner for implementing further programming.
City Harvest

City Harvest is the city’s largest food rescue organization which delivers meals to food pantries and soup kitchens and other community partners. They are dedicated to feeding the city’s adults and children and addressing hunger’s underlying determinants by supporting affordable access to nutritious foods in low-income communities, and educating individuals, families, and communities in the prevention of diet-related diseases. Their partners include food donors (farmers, restaurants, cafes, wholesalers, supermarkets), corporations and foundations such as the Helmsley Charitable Foundation, Robin Hood, and the Clark Foundation, and local community organizations. With the reach of City Harvest, Wholesome Wave can partner to bring SNAP Doubling and public and family engagement to utilizers of the City Harvest network.

New York City Health and Hospitals Corporation (HHC)

New York City Health and Hospitals Corporation is an integrated medical system and public benefit corporation comprised of hospitals, neighborhood health centers, long-term care, and nursing homes. Within their many services, they have a focus area on plant-based nutrition which allows for a unique partnership for providers to get involved in Wholesome Wave programming. The FVRx Program was successful within the HHC Harlem Hospital Center and the HHC Lincoln Medical Center with a 40% lower body mass index in enrolled children and reported increased amount of food at home for families. Additionally, HHC hosts farmers’ markets at 12 patient care locations in partnership with Harvest Home, GrowNYC, and Greenmarket, in which shoppers can utilize EBT cards, Health Bucks, Green Checks, Senior Farmers Market Nutrition Program (FMNP coupons) or WIC coupons. Some of the farmers’ markets offer on-site cooking and nutrition demonstrations, provide health recipes and eating tips, and other education materials that can be utilized to further Wholesome Wave’s programmatic values. It is recommended that Wholesome Wave 1) partner with the hospital-sponsored farmers’ markets to distribute coupons and 2) implement further FVRx programs.

Office of Food & Nutrition Services (OFNS)

The Office of Food and Nutrition Services currently fosters strategic partnerships through the city. They currently partner with businesses, associations, not-for-profit organizations, colleges, universities, and school districts. Their partners include City Harvest, Food Corps, Grow to Learn NYC, GrowNYC, the New York Coalition for Healthy School Food, and the New York City Coalition Against Hunger. With Health Bucks programming already established in the area, Wholesome Wave can bring added benefit to New York City. Given that food partners are already established, Wholesome Wave can bring additional value and support to their partners by discovering what are the unreached populations and further connecting to them through the operations of the organization. Additionally, Wholesome Wave can support the collaboration between OFNS and GrowNYC, as one of their primary programs include Greenmarkets. All Greenmarkets accept SNAP/EBT (in addition to Health Bucks, Greenmarket Buckets, etc.), therefore there is a distribution opportunity within this collaboration.
Redemption Partners
Grocery shopping in New York City is challenging, as transportation and crowding remain an issue. However, most New York City residents get their groceries from small local stores. Redemption partners within New York City include Acme Markets, BJs (located in the Bronx, Queens, Brooklyn, Manhattan, and Yonkers), Fresh Direct, Stop and Shop, Walmart, and Whole Foods. Fresh Direct is an online grocery service that delivers to residences and offices in NYC and the NY metro area and is a distributor for organic and local groceries as well.

A key redemption partner for Wholesome Wave includes farmers’ markets as well. Majority of the farmers’ markets in NYC are operated under 37 different organizations, including Harvest Home and Greenmarket. The number of farmers’ markets has increased to 142 in FY2 2016. Many New York City residents’ shop at farmers markets as other grocery stores do not carry fresh fruits and vegetables. A sample list of potential farmers’ markets available in New York City are listed in Table 2. While the exact proportion of farmers’ markets that accept SNAP benefits through EBT and already utilize Health Bucks is unknown, Wholesome Wave has the opportunity to further the distribution of coupons through farmers’ markets in low-income neighborhoods.

Partnership Market Approach
Combating food insecurity at a city-level is complex and requires key partnerships and approaches. One approach is to use existing interventions as vehicles for the Wholesome Communities Initiative. It is important to increase the purchasing power for New York City residents, to provide nutritional education, and increase access to fruits and vegetables. One borough in New York City, the Bronx has piloted such programming. The Bronx had higher rates of obesity, diabetes, and heart disease than other boroughs in New York City, disproportionately affecting racial and ethnic minorities. Additionally, the Bronx had the highest percentage of NYC residents with lower fruit and vegetable consumption. The Department of Health and Mental Hygiene (DOHMH) with help with the Laurie M. Tisch Illumination Fund has developed ways to increase access for residents including the Green Cart program. Green Carts are mobile food carts that offer fresh fruits and vegetables in neighborhoods with limited access to health foods (Figure 3). However, there are some logistical issues with the Green Cart program. For example, these carts were only available in high pedestrian areas and some were selling sugary foods and beverages. The Green Cart Initiative has moved into four additional target regions including: Northern Manhattan and East/Central Harlem, North/Central Brooklyn, Western Queens and Northern Staten Island. The original goal was to increase consumption by at least 75,000 New Yorkers. Wholesome Wave has the opportunity to partner with the DOHMH to allow for SNAP customers to use their benefits as well as Wholesome Wave Rewards Cards at these carts.
Additionally, in New York City is important to seek out major farmer market operators. FMNP has developed partnerships already with a network of farmers’ markets, therefore there is the opportunity to reach out to similar partners who are willing to tackle similar missions of food insecurity and access. They would already have the capacity and required equipment to operate initiatives of Wholesome Wave. To further partnerships with farmers’ markets, there is an opportunity for how to strategically fulfill the education component of the Wholesome Wave’s initiatives. Currently, there is the NYC DOHMH Stellar Farmers Markets program. This program provides free, bilingual nutrition education and cooking demonstrations at farmers’ markets across the city. The nutritionists also offer workshops that address health eating, food resource management, food safety, and tips for saving money when food shipping. An incentive could be Wholesome Wave coupons for participating in such programming.

**Participant Landscape in NYC**

**Location**
Participants that would benefit from Wholesome Wave initiatives would be those who suffer from food insecurity the most in New York City. The most important value for potential participants for Wholesome Wave includes accessibility and affordability. The neighborhood with the highest rate of food insecurity is Brooklyn, followed by the Bronx, and Manhattan. These neighborhoods also have the highest participation in SNAP benefits. The Bronx, for example, is saturated with fast food restaurants and further identified as a food desert. Furthermore, Bronx Borough President Ruben Diaz Jr. has associated food insecurity in this area with significant cuts to SNAP from the federal government. Given this, approximately 48.8% of Emergency Food Providers surveyed in the Bronx indicated that they could not meet the hunger demand.

**Population**
As noted by the Yale Student Consulting Group, there are various populations that would benefit from Wholesome Wave Initiatives. One population, for example, includes veterans. Currently, in New York City, 10.1% of the 210,000 veterans are below the federal poverty line. Most veterans live in Queens and Brooklyn (where the Fort Hamilton Military Base is located) thus it is recommended that Wholesome Wave increase access in these boroughs. There is a variety of veteran-serving organizations, coordinated under NYServes. They have received investments from the Robin Hood Foundation and partner with a variety of organizations in the city.

A second population to focus on in New York City are senior citizens. The number of food insecure seniors in New York City increased by 16.5% from 2013-2015. This could be due to a variety of reasons including shrinking social support networks, fixed incomes, and limited mobility. Another population that is severely food-underserved in New York City is immigrants. The current government has proposed regulations that would add SNAP to the list of programs that could disqualify an immigrant from becoming a green card holder, which indicates threats
and barriers to food access for immigrants.\textsuperscript{39,40} Even if immigrants are eligible for SNAP benefits, they may fear seeking support, therefore there is an opportunity to reach this population through existing organizations that already are dedicated to fighting for the rights of immigrants and refugees, including Make the Road New York and New York Immigration Coalition.

**Participant Market Approach**

To further reach more participants, it is important to recognize that many New York City residents are still not receiving the benefits to which they are entitled to purchase food. They may not realize that they actually qualify for supplemental assistance or not know how to initially apply for it. Wholesome Wave can partner with community-based organizations to provide SNAP screenings at farmers’ markets and other food redemption sites. For instance, a sector of Hunger Free America is the Benefits Access Team, which aids individuals and families through each step of the SNAP application process, from conducting pre-screenings and filing applications to serving as client advocates. They also have a resource called the NYC Nutrition Benefits Calculator that can be assimilated into the Wholesome Wave participant marketing strategies. It can be located here: \url{https://www.hungerfreeamerica.org/civicrm/eligibility}.

To recruit veterans, an avenue would be through major partners such as the Military Family Clinic at NYU Langone, the VA NY Harbor Health System, and Hope for the Warriors. All of these organizations coordinate the health care of many veterans and would serve as a contact point for them and their veterans for both distribution of incentive coupons as well as the FVRx program. Additionally, systems such as the Senior Citizens Rent Increase Exemption (SCRIE) program can systematically identify senior citizens who are eligible but not receiving SNAP benefits. Other government initiatives that can help with the identification and recruitment of participants include the HRA’s office of SNAP outreach services (SNAP-OS). The budget for this program is approximately $2 million dollars and the program works to educate the public about SNAP benefits. Their services include training and presentations as well as screenings and assistance with the application process. There is existing partnerships with CBOs, thus an important avenue for Wholesome Wave to utilize to recruit participants as well. There are other New York City Region Outreach Providers including, Hunger Solutions New York, Public Health Solutions, St. Johns Bread of Life, United Way of NYC, Council of Senior Center and Services of NYC, Inc, and NY Common Pantry. Contact information for these providers are listed in Table 2.

One key message that is important to disseminate is that SNAP benefits and Wholesome Wave initiatives can make food cheaper and thus increase purchasing power for individuals. Effective communication to combat this challenge is to market within grocery stores how particular items can be purchased at a lower cost. A challenge with fresh produce is how to combat the storage and preparation of fruits and vegetables. Informational materials that offer specific recipes and how to store such fruits and vegetables should be available to participants. Similar programming,
such as the Farmers’ Market Nutrition Program, has shown that there is increased consumption of fruits and vegetables and utilization of coupons when the intervention is coupled with nutrition education. Integrating education for Wholesome Wave can be done through the SNAP-Ed programming. Additionally, the utilization of social media is an important tool for education. For example, short promotional videos that can be utilized on social media that can educate participants about Wholesome Wave, its benefits, and how to connect to its programming would be useful. Additionally, when partnerships develop with farmers’ markets, marketing materials should include flyers, posters, and maps and additional information of participating vendors. Marketing materials should include where to redeem benefits, and testimonials of how the program is working from the perspective of providers and participants. As the HHC has demonstrated, farmers’ markets are an opportune place for further education and cooking tutorials to be conducted. Other education can be organized through the “Just Say Yes” curriculum, which purely aims to teach nutrition education to low-income New Yorkers and those participating in SNAP. Social media content can be modeled after the content provided from this program.

**Metrics**

An essential component of Wholesome Wave’s strategy is to evaluate the program’s success with key metrics in targeted regions for their two operational approaches. These metrics are used to determine the efficacy of the program primarily from the perspective of the consumers, and potentially from the perspective of redemption partners and health providers. Both programs aim to increase the consumption of fresh produce and for the FVRx program, to improve BMI. There are already established data collection methods that Wholesome Wave is utilizing for the Doubling SNAP and the FVRx Programs. However, there might be a challenge for assessing success on a larger level, given that Wholesome Wave is expanding across the country. To collect data from consumers who are utilizing Wholesome Wave coupons and tokens on a larger scale, current validated surveys should be used to measure fruit and vegetable consumption which can accommodate for any fragmentation across regions or markets. For example, the Behavioral Risk Factor Surveillance System can be used to measure pre and post program effectiveness for participants to determine health-related risk behaviors. However, there are challenges and limitations with drop-out and actually keeping track of participants. Current data supports that the most important determinants related to decisions about fruit and vegetable intake include self-efficacy, social/intrapersonal influence, demographic factors, attitudes, awareness, barriers, and threats. Metrics to be evaluated include self-efficacy, fruit and vegetable consumption habits, ease of access to fruits and vegetables, and other clinical measures with the FVRx programs (i.e., pre and post BMI).

One way to measure the coupon incentives is to create a trackable barcode on each coupon that can measure where it is being used and how many are being used versus how many are distributed. This data point could be useful to see where distribution is strong and where it can be
increased geographically (whether it is by borough or by redemption vendors). This will align with Wholesome Wave’s current card partner shopping data that tracks purchasing power of fruits and vegetables, shopping basket scores, and redemption of incentive trends.

**Conclusion**

Given that SNAP is a critical program to assist low-income people and help address food insecurity, there needs to be structural changes to address some of the challenges for access to these benefits. This includes making the application for SNAP easier for residents to apply as well as increasing the awareness for SNAP nutrition incentives. There needs to be additional collaboration between food retail stores, farmers’ markets, and other food cooperatives and the SNAP program to increase options for healthier foods and education around healthy eating behaviors in general. Wholesome Wave has the opportunity to enter into New York City to tackle some of these structural challenges as well as create an impact upon the food insecurity problem. The existing network of food coordination and organizations in New York City is complex, therefore it is recommended that there are a few important action points to consider when first entering this market and further expanding upon their programming.

1. The major funders identified in this report all have a focus on food insecurity and improving the health of New York City residents through the means of food coordination. They are: United Way of New York City, Helmsley Charitable Trust, New York State Health Foundation, and JPB Foundation. Prior to submitting formal applications, there should be contact made to key people within each funding source in New York City through Wholesome Wave communication methods (i.e. newsletters). The outreach should ensure that prior success in other markets is highlighted through news coverage, success stories, and case studies.

2. The food partnership landscape in New York City is diverse, and as such, there is the opportunity to expand Wholesome Wave initiatives. Through cooperation with NYC Food Policy and the Office of Food & Nutrition Services, Wholesome Wave can develop partnerships with the other initiatives they support such as Green Carts and Shop Health NYC, so that populations and neighborhoods that are not reached yet can be established. Through City Harvest, Wholesome Wave can bring SNAP doubling to their utilizers, given that the population served is already struggling with food insecurity. Given that the FVRx program was successful within HHC, Wholesome Wave can leverage this partnership to distribute coupons at the hospital-sponsored farmers’ markets.

3. Three major populations to first focus on within New York City include veterans, senior citizens, and immigrants. It is suggested that additional partnerships with organizations that support these populations in other social-determinant areas should be made. This includes the Military Family Clinic at NYU Langone, the VA NY Harbor Health System, Hope for the Warriors, HRA’s office of SNAP outreach services, Make the Road New York, and the New York Immigration Coalition.
4. Best practices for marketing strategies for New York City include social media campaigns that introduce education around Wholesome Waves benefits. They can include testimonials, comparison of food prices with and without SNAP doubling, and suggestions of recipes and storage for fresh produce.
References:


Appendices

Figure 1. New York City’s Meal Gap, 2016

Figure 2. State of Obesity, New York City 2017

25.7%  
Rank among states (2017)

45  
Adult obesity rate in New York (1990-2017)
Figure 3. Location of NYC Green Carts

<table>
<thead>
<tr>
<th>Partner</th>
<th>Aligned Initiatives</th>
<th>Website</th>
<th>Contact Information</th>
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<tr>
<td>Food Policy NYC</td>
<td>Improve healthy food access and awareness</td>
<td><a href="https://www1.nyc.gov/site/foodpolicy/index.page">https://www1.nyc.gov/site/foodpolicy/index.page</a></td>
<td>212-396-7744</td>
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<tr>
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<td><a href="mailto:info@nycfoodpolicy.org">info@nycfoodpolicy.org</a></td>
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<tr>
<td>City Harvest</td>
<td>Supporting affordable access to nutritious foods in low-income communities, and</td>
<td><a href="https://www.cityharvest.org/">https://www.cityharvest.org/</a></td>
<td>646-412-0637</td>
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<tr>
<td></td>
<td>educating individuals, families, and communities in the prevention of diet-related</td>
<td></td>
<td><a href="mailto:partnerships@cityharvest.org">partnerships@cityharvest.org</a></td>
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<tr>
<td></td>
<td>diseases.</td>
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<td>New York City Health and Hospitals Corporation (HHC)</td>
<td>Focus area on plant-based nutrition and support for Farmers’ Markets</td>
<td><a href="https://www.nychealthandhospitals.org/">https://www.nychealthandhospitals.org/</a></td>
<td>Farmers’ Markets Partnerships with: Harvest Home 212-828-3361 <a href="mailto:info@harvesthomefm.org">info@harvesthomefm.org</a> GrowNYC 212-788-7900 Greenmarket 212-788-7476</td>
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<tr>
<td>Office of Food &amp; Nutrition Services</td>
<td>Partner with food access initiatives and expand participant outreach</td>
<td><a href="http://www.schoolfoodnyc.org/public1/contact_form.asp">http://www.schoolfoodnyc.org/public1/contact_form.asp</a></td>
<td>718-707-4300</td>
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<td>Military Family Clinic at NYU Langone</td>
<td>Veteran Participant Outreach</td>
<td><a href="https://nyulangone.org/locations/steven-a-cohen-military-family-center">https://nyulangone.org/locations/steven-a-cohen-military-family-center</a></td>
<td>855-698-4677 <a href="mailto:militaryfamilyclinic@nyulangone.org">militaryfamilyclinic@nyulangone.org</a></td>
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<tr>
<td>Hope for the Warriors</td>
<td>Veteran Participant Outreach</td>
<td><a href="https://www.hopeforthewarriors.org/">https://www.hopeforthewarriors.org/</a></td>
<td><a href="mailto:info@hopeforthewarriors.org">info@hopeforthewarriors.org</a></td>
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<tr>
<td>Hunger Solutions New York</td>
<td>Participant SNAP Outreach</td>
<td><a href="http://www.foodhelpny.org">www.foodhelpny.org</a></td>
<td>518-436-8757 SNAP@hungher solutionsny.org</td>
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<tr>
<td>Public Health Solutions</td>
<td>Participant SNAP Outreach</td>
<td><a href="http://www.healthsolutions.org/">http://www.healthsolutions.org/</a></td>
<td>646-619-6400 <a href="mailto:info@healthsolutions.org">info@healthsolutions.org</a></td>
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<tr>
<td>St. Johns Bread of Life</td>
<td>Participant SNAP Outreach</td>
<td><a href="https://www.breadandlife.org/">https://www.breadandlife.org/</a></td>
<td>718-574-0058 <a href="https://www.breadandlife.org/contact-us">https://www.breadandlife.org/contact-us</a></td>
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<tr>
<td>United Way of NYC</td>
<td>Participant SNAP Outreach</td>
<td><a href="https://www.unitedwaynyc.org/">https://www.unitedwaynyc.org/</a></td>
<td>212-251-2500 <a href="mailto:contactus@uwnyc.org">contactus@uwnyc.org</a></td>
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<td>Council of Senior Center</td>
<td>Senior Citizen SNAP Outreach</td>
<td><a href="http://www.liveon-ny.org/">http://www.liveon-ny.org/</a></td>
<td>212-398-6565 <a href="mailto:info@liveon-ny.org">info@liveon-ny.org</a></td>
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<td>Bay Ridge Green Market</td>
<td>3rd Ave &amp; 95th St (Walgreen's parking lot), Bay Ridge</td>
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<td>Saturdays, May 7th-November 19th; 8am-3pm</td>
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<td>Brooklyn Borough Hall Saturday Greenmarket</td>
<td>On plaza at Court St and Montague St, Brooklyn Heights</td>
<td>Brooklyn</td>
<td>Tuesdays, Thursdays, Saturdays, year-round; 8pm-5pm</td>
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<td>Carroll Gardens Greenmarket</td>
<td>Carrol Street, between Smith and Court Streets, Carroll Gardens</td>
<td>Brooklyn</td>
<td>Sundays, year-round; 8am-3pm</td>
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<td>Fort Greene Park Greenmarket</td>
<td>Washington Park</td>
<td>Brooklyn</td>
<td>Saturdays, year-round 8am-4pm</td>
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<td>Greenpoint/McCarren Park Greenmarket</td>
<td>North 12th St &amp; Union Ave, Greenpoint/Williamsburg</td>
<td>Brooklyn</td>
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<td>Grand Army Plaza Greenmarket</td>
<td>Prospect Park West &amp; Flatbush Ave, Prospect Heights</td>
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<td>Saturdays year-round; 8am-4pm</td>
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<td>Bronx Borough Hall Greenmarket</td>
<td>161st and Grand Concourse, Concourse Village</td>
<td>Bronx</td>
<td>Tuesdays, June 7 to November 22, 8 am-4 pm</td>
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<td>Poe Park Greenmarket</td>
<td>E. 192nd St between Grand Concourse &amp; Valentine, Bedford Park</td>
<td>Bronx</td>
<td>Tuesdays, June 28th-November 22nd, 8am-3pm</td>
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<td>Wholesale Greenmarket</td>
<td>290 Halleck St (at Viele Ave), Hunts Point</td>
<td>Bronx</td>
<td>Tuesday-Saturday, April 8th-Dec 31st; 2am-8am</td>
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<td>Dag Hammarskjold Plaza Greenmarket</td>
<td>Dag Hammarskjold Plaza, 47th Street at Second Ave, Midtown East, Manhattan</td>
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<td>Wednesdays, year-round; 8am-4pm</td>
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<td>Inwood Greenmarket</td>
<td>Isham St between Seaman Ave and Cooper St, Inwood, Manhattan</td>
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<td>79th Street Greenmarket</td>
<td>Columbus Ave between 77th &amp; 81st Sts, Upper West Side, Manhattan</td>
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<td>Open Sundays, year-round; 9am-4pm</td>
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<td>Stuyvesant Town Greenmarket</td>
<td>South end of Stuyvesant Town Oval near 14th Street Loop between 1st Ave &amp; Avenue A, Stuyvesant Town</td>
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<td>Sundays, May 22nd-November 20th, 9:30am-4pm</td>
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<td>Tompkins Square Greenmarket</td>
<td>Ave A between E 7th St &amp; E 8th St., Alphabet City, Manhattan</td>
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<td>Sundays, year-round; 9am-6pm</td>
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<td>Tribeca Saturday Greenmarket</td>
<td>Greenwich St between Chambers and Duane, Tribeca, Manhattan</td>
<td>Manhattan</td>
<td>Wednesdays and Saturdays, year-round; 8am to 3pm</td>
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<td>Union Square Greenmarket</td>
<td>North and West sides of Union Square Park, Union Square/Flatiron, Manhattan</td>
<td>Manhattan</td>
<td>Mondays, Wednesdays, Fridays, and Saturdays year-round; 8am-6pm</td>
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<td>Tucker Square Thursday Greenmarket</td>
<td>W 66th St &amp; Columbus Ave, Upper West Side, Manhattan</td>
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<td>Thursdays, year-round; 8am-5pm</td>
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<td>Jackson Heights Greenmarket</td>
<td>34th Ave at 78th St., Jackson Heights, Queens</td>
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<td>Sundays, year-round; 8am-3pm</td>
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<tr>
<td>Saint George Greenmarket</td>
<td>St. Mark’s Place and Hyatt St, St. George, Staten Island</td>
<td>Staten Island</td>
<td>Saturdays year-round; 8am-2pm</td>
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